



MiTek USA, Inc. MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661 Telephone 916-755-3571

Re: 105781

Yavapai County 2 Bedroom

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Ballard-Mesa, Snow.

Pages or sheets covered by this seal: R64674233 thru R64674255 My license renewal date for the state of Arizona is March 31, 2022.

Arizona COA: 11906-0

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.



December 9,2020

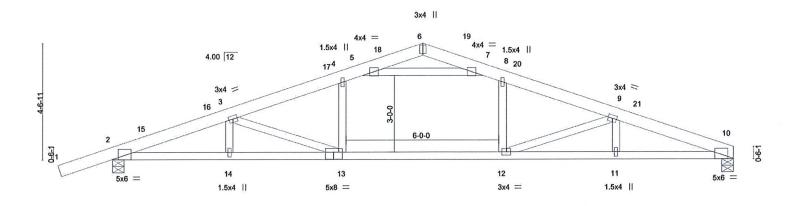
Dyer, Cecil

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

REVIEWED FOR DESIGN CRITERIA ONLY

Job		Truss	Truss Type		Qty	Ply	Yavapai County 2 Bedroom	TO LAKE JUNE THE STORY
			22-		-			R64674233
10578	31	A1	Common		4	1		
							Job Reference (optional)	
Balla	ard Truss LLC.	Snowflake, AZ - 85937,	•		8.	430 s Nov	30 2020 MiTek Industries, Inc. 7	Tue Dec 8 08:35:32 2020 Page 1
				ID:U?NWO	CY_P_W3D	7wwZ7l1e	8yB4r?-Yj0HsGrmMNqkbscou91	YNyS9PfuLsmGdR6BQ84yB4X9
	-2-0-0	4-7-0	9-2-0	12-2-0	15-2-	0 1	19-9-0	24-4-0
	2-0-0	4-7-0	4-7-0	3-0-0	3-0-0		4-7-0	4-7-0

Scale = 1:43.3



1	4-7-0	9-2	2-0		15-2-0				19-9-0	24	-4-0
,	4-7-0	4-7	<b>'-0</b>		6-0-0		1		4-7-0	4-	7-0
Plate Offsets (X,Y) [2	:0-2-10,Edge], [10:0-2-10	,Edge], [13:0-3-	-12,0-3-4]								
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 YES PI2014	CSI. TC BC WB Matrix	0.49 0.73 0.92	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.37 -0.47 0.11		I/defl >782 >605 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 107 lb	GRIP 185/144 FT = 10%

BRACING-TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E 2x4 SPF 1650F 1.5E

**BOT CHORD** 

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS.

(size) 10=0-5-8, 2=0-5-8 Max Horz 2=99(LC 14)

Max Uplift 10=-108(LC 11), 2=-219(LC 10) Max Grav 10=1570(LC 22), 2=1816(LC 21)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD

2-3=-3735/312, 3-4=-2893/242, 4-5=-2670/253, 5-6=-442/19, 6-7=-436/18,

7-8=-2665/259, 8-9=-2900/257, 9-10=-3866/382

**BOT CHORD** 2-14=-240/3418, 13-14=-240/3418, 12-13=-115/2682, 11-12=-306/3574, 10-11=-306/3574

**WEBS** 8-12=-4/426, 9-12=-1125/266, 4-13=0/385, 3-13=-982/225, 5-7=-2338/289

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 12-2-0, Exterior(2R) 12-2-0 to 15-8-0, Interior(1) 15-8-0 to 24-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

referenced standard ANSI/TPI 1.

- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) 150.0lb AC unit load placed on the top chord, 12-2-0 from left end, supported at two points, 3-0-0 apart.
- 6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=108, 2=219. 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and



Structural wood sheathing directly applied or 4-4-10 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and bracing of truss systems, see ANSIIIPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

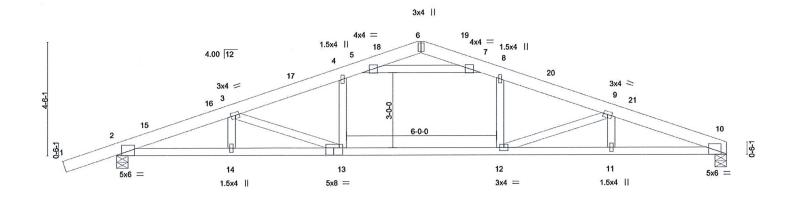


MiTek

MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661

Job	Truss	Truss Type		Qty	Ply	Yavapai County 2 Bedroom		- 1
		7.5					R64674234	.
105781	A2	Common		2	1			-
	10 m = 10					Job Reference (optional)		
Ballard Truss LLC,	Snowflake, AZ - 85937,			8	430 s Nov	30 2020 MiTek Industries, Inc. T	ue Dec 8 08:35:33 2020 Page 1	
			ID:U?NWC	CY_P_W3E	7wwZ7l1e	e8yB4r?-0wag3csO7hybC0B_StZr	nw9?K73DabDemfmxzgWyB4X8	
-2-0-0	4-7-0	9-2-0	12-2-0	15-2	-0	19-9-0	24-4-0	
2-0-0	4-7-0	4-7-0	3-0-0	3-0	-0	4-7-0	4-7-0	
	-2-0-0	105781 A2  Ballard Truss LLC, Snowflake, AZ - 85937,  -2-0-0 4-7-0	105781 A2 Common  Ballard Truss LLC, Snowflake, AZ - 85937,  -2-0-0 4-7-0 9-2-0	105781 A2 Common  Ballard Truss LLC, Snowflake, AZ - 85937,  ID:U?NWC	105781 A2 Common 2  Ballard Truss LLC, Snowflake, AZ - 85937, ID:U?NWOcY_P_W3D  -2-0-0 4-7-0 9-2-0 12-2-0 15-2	105781 A2 Common 2 1  Ballard Truss LLC, Snowflake, AZ - 85937, ID:U?NWOcY_P_W3D7wwZ7l1e  -2-0-0 4-7-0 9-2-0 12-2-0 15-2-0	Digitary   Digitary	R64674234

Scale = 1:44.0



	4-7-0 4-7-0		2-0 7-0	15-2-0 6-0-0			19-9-0 4-7-0		-4-0 7-0
Plate Offsets (X,Y)	[2:0-2-10,Edge], [10:0-2-10,	Edge], [13:0-3-	12,0-3-4]						
LOADING (psf)   TCLL	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/Tf	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.49 BC 0.73 WB 0.91 Matrix-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.37 11-12 -0.47 11-12 0.11 10	l/defl >782 >606 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 107 lb	<b>GRIP</b> 185/144 FT = 10%

BRACING-

TOP CHORD **BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

2x4 SPF 1650F 1.5E BOT CHORD

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS.

(size) 10=0-5-8, 2=0-5-8 Max Horz 2=99(LC 18)

Max Uplift 10=-108(LC 11), 2=-219(LC 10) Max Grav 10=1570(LC 22), 2=1816(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-3736/343, 3-4=-2892/261, 4-5=-2670/272, 5-6=-457/17, 6-7=-451/16,

7-8=-2664/280, 8-9=-2900/277, 9-10=-3866/394 **BOT CHORD** 2-14=-274/3418, 13-14=-274/3418, 12-13=-135/2681, 11-12=-318/3574, 10-11=-318/3574

WEBS 8-12=-4/426, 9-12=-1126/266, 4-13=0/385, 3-13=-983/225, 5-7=-2317/311

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 12-2-0, Exterior(2R) 12-2-0 to 17-1-6, Interior(1) 17-1-6 to 24-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) 150.0lb AC unit load placed on the top chord, 12-2-0 from left end, supported at two points, 3-0-0 apart.
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20,0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=108 2=219
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-5-8 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss experty amage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusse systems, see ANSIIPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom	
		***		-	* /	R64674235
105781	A3	Hip	1	1		
		17.00			Job Reference (optional)	
Ballard Truss LLC, Sno	wflake, AZ - 85937,		8	430 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:34	2020 Page 1
			ID:U?NWOcY_P_W3D7	wwZ7l1e8y	B4r?-U672Hxt0u_4SqAmA?a40SNXY7TaEKmDwuC	QgXDzyB4X7
-2-0-0	5-0-0	10-0-0	14-4-0	19-	4-0 24-4-0	26-4-0
2-0-0	5-0-0	5-0-0	4-4-0	5-0	0-0 5-0-0	2-0-0
					, ,	

Scale = 1:46.6

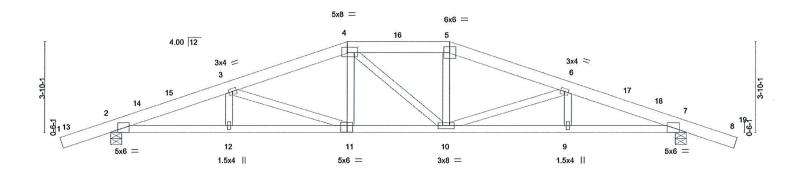


Plate Offsets (X,Y)	5-0-0 5-0-0 - [2:0-3-6,Edge], [4:0-5-4,0-	10-0 5-0- 2-12], [7:0-3-6,E	-0	14-4-0 4-4-0 -3-4]	19-4-0 5-0-0		24-4-0 5-0-0	
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC 0.28 BC 0.64 WB 0.57 Matrix-SH	DEFL. Ver(LL) Vert(CT) Horz(CT)	in (loc) I/defl -0.21 11-12 >999 -0.30 11-12 >946 0.12 7 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 114 lb	GRIP 185/144 FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

2x6 SPF 1650F 1.5E TOP CHORD **BOT CHORD** 2x4 SPF 1650F 1.5E

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS. (size) 2=0-5-8, 7=0-5-8

Max Horz 2=-75(LC 15)

Max Uplift 2=-308(LC 10), 7=-308(LC 11) Max Grav 2=2144(LC 35), 7=2144(LC 35)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 2-3=-3920/591, 3-4=-2917/511, 4-5=-2678/539, 5-6=-2922/534, 6-7=-3918/611

**BOT CHORD** 2-12=-469/3538, 11-12=-469/3538, 10-11=-331/2673, 9-10=-505/3536, 7-9=-505/3536

WEBS 3-11=-933/154, 4-11=0/410, 5-10=-1/408, 6-10=-925/152, 4-10=-280/289

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 10-0-0, Exterior(2E) 10-0-0 to 14-4-0, Exterior(2R) 14-4-0 to 19-4-0, Interior(1) 19-4-0 to 26-4-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.

referenced standard ANSI/TPI 1.

- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and



Structural wood sheathing directly applied or 4-5-2 oc purlins.

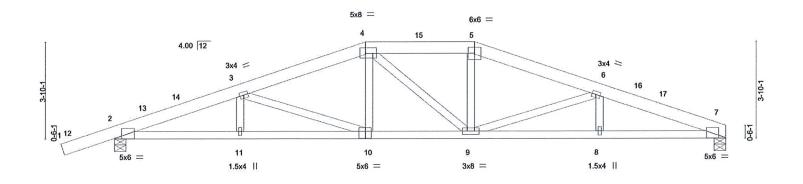
Rigid ceiling directly applied or 10-0-0 oc bracing.

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Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom		
						R64	674236
105781	A3A	Hip	1	1			
			*		Job Reference (optional)		
Ballard Truss LLC, S	nowflake, AZ - 85937,		8	.430 s Nov	30 2020 MiTek Industries, Inc	:. Tue Dec 8 08:35:35 2020 Pa	ge 1
			ID:U?NWOcY_P_\	N3D7wwZ7	7I1e8yB4r?-zlhQUHueflCJSKI	LNZHbF?a4jjswh3Bx374Q4lPyB	4X6
-2-0-0	5-0-0	10-0-0	14-4-0	1	19-4-0	24-4-0	
2-0-0	5-0-0	5-0-0	4-4-0	1	5-0-0	5-0-0	

Scale = 1:43.9



<del> </del>	5-0-0 5-0-0	1	10-0-0 5-0-0	14-4-0 4-4-0		19-4-0 5-0-0		24-4-0 5-0-0	
Plate Offsets (X,Y)	[2:0-3-6,Edge], [4:0-5-4,0-2	-12], [7:0-3-2,E	dge], [10:0-2-12,	0-3-4]					
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.2: BC 0.6: WB 0.6: Matrix-SH	9 Vert(CT) 7 Horz(CT)	in (loc) -0.21 10-11 -0.31 10-11 0.13 7	l/defl >999 >926 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 110 lb	GRIP 185/144 FT = 10%

BRACING-TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

2x4 SPF 1650F 1.5E **BOT CHORD** 

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS. (size) 7=0-5-8, 2=0-5-8

Max Horz 2=86(LC 18)

Max Uplift 7=-198(LC 11), 2=-309(LC 10) Max Grav 7=1782(LC 35), 2=2160(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-3966/623, 3-4=-2967/547, 4-5=-2742/550, 5-6=-2992/545, 6-7=-4102/645

**BOT CHORD** 2-11=-535/3580, 10-11=-535/3580, 9-10=-394/2721, 8-9=-560/3757, 7-8=-560/3757

**WEBS** 3-10=-928/149, 4-10=0/410, 4-9=-274/305, 5-9=-18/445, 6-9=-1094/182

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 10-0-0, Exterior(2E) 10-0-0 to 14-4-0, Exterior(2R) 14-4-0 to 19-4-0, Interior(1) 19-4-0 to 24-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
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- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=198, 2=309,
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-1-0 oc purlins.

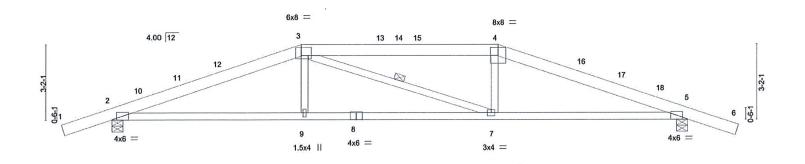
Rigid ceiling directly applied or 9-7-4 oc bracing.

A WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss was and bracing of the stability and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of truss systems, see ANSIIIPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom	
		***	-	100	5 3	R64674237
105781	A4	Hip	1	1		
1.757.71					Job Reference (optional)	
Ballard Truss LLC. Sno	owflake, AZ - 85937.		8.	430 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:37	2020 Page 1
		ID:U?N	NOcY_P_V	V3D7wwZ7	7I1e8yB4r?-vhpAvzvvBvT1hdVlhidj4?9x5gcdXDvMaO	vBpHyB4X4
-2-0-0	8-0-0	16-4-0	101 C 2-0 E	1	24-4-0	26-4-0
2-0-0	8-0-0	8-4-0			8-0-0	2-0-0

Scale = 1:46.6



-	8-0-0 8-0-0		16-4-0 8-4-0		24- 8-0	4-0 )-0	
Plate Offsets (X,Y) [2:	0-2-6,Edge], [3:0-5-4,0-4-4], [5:0-2-6,Ed	ge]					
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.81 BC 0.66 WB 0.13 Matrix-SH	DEFL. in Vert(LL) -0.20 Vert(CT) -0.33 Horz(CT) 0.11	(loc) I/de 7-9 >99 7-9 >87 5 n/	9 240 5 180	PLATES MT20 Weight: 97 lb	GRIP 185/144 FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

2x4 SPF 1650F 1.5E **BOT CHORD** 

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud \*Except\* **WEBS** 

3-7: 2x4 SPF 1650F 1.5E

REACTIONS. (size) 2=0-5-8, 5=0-5-8

Max Horz 2=63(LC 18)

Max Uplift 2=-319(LC 10), 5=-319(LC 11) Max Grav 2=1932(LC 35), 5=1932(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-3416/541, 3-4=-3101/557, 4-5=-3422/541 **BOT CHORD** 2-9=-395/3092, 7-9=-391/3101, 5-7=-410/3098

WEBS 3-9=0/327, 3-7=-366/374, 4-7=0/327

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-Č Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 8-0-0, Exterior(2R) 8-0-0 to 12-11-6, Interior(1) 12-11-6 to 16-4-0, Exterior(2R) 16-4-0 to 21-3-6, Interior(1) 21-3-6 to 26-4-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=319, 5=319.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 2-9-3 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

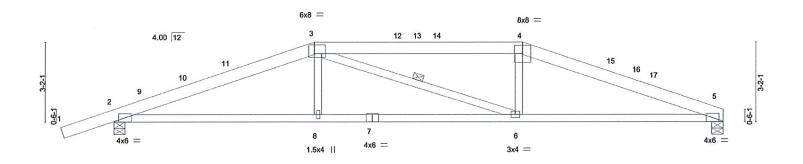
1 Row at midpt

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Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom
	12	Y 5 1			R64674238
105781	A4A	Hip	1	1	
S. A. S. S. S.					Job Reference (optional)
Ballard Truss LLC, Si	owflake, AZ - 85937,		8	.430 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:38 2020 Page 1
		ID:U?NV	OcY_P_W	BD7wwZ7I1	le8yB4r?-NtNZ7JwXyDbuJn4yEQ8ydDi6s4xKGg9Vp2ekMkyB4X3
-2-0-0	8-0-0	16-4-6		22-10-10-10-10	24-4-0
2-0-0	8-0-0	8-4-0			8-0-0

Scale = 1:44.1



-	8-0-0 8-0-0				16-4-0 8-4-0					24-4-0 8-0-0	
Plate Offsets (X,Y) [2	2:0-2-6,Edge], [3:0-5-4,0-4-4	1], [5:0-2-2,E	dge]								
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES 12014	CSI. TC BC WB Matrix	0.81 0.76 0.13 c-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.21 -0.33 0.11	(loc) 5-6 5-6 5	I/defl >999 >863 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 93 lb	GRIP 185/144 FT = 10%
LUMBER- TOP CHORD 2x6 SPF	1650F 1.5E				BRACING- TOP CHORI	o s	tructura	al wood s	heathing dire	ectly applied or 2-9-3	oc purlins.

**BOT CHORD** 

WEBS

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt

2x6 SPF 1650F 1.5E

**BOT CHORD** 2x4 SPF 1650F 1.5E

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud \*Except\* **WEBS** 

3-6: 2x4 SPF 1650F 1.5E

REACTIONS. (size) 5=0-5-8, 2=0-5-8

Max Horz 2=73(LC 14)

Max Uplift 5=-209(LC 11), 2=-321(LC 10) Max Grav 5=1570(LC 35), 2=1948(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-3429/573, 3-4=-3180/594, 4-5=-3470/586

**BOT CHORD** 2-8=-462/3104, 6-8=-457/3113, 5-6=-467/3177

**WEBS** 3-8=0/326, 3-6=-342/444, 4-6=0/326

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 8-0-0, Exterior(2R) 8-0-0 to 12-11-6, Interior(1) 12-11-6 to 16-4-0, Exterior(2R) 16-4-0 to 21-3-6, Interior(1) 21-3-6 to 24-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of trues to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 5=209, 2=321.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

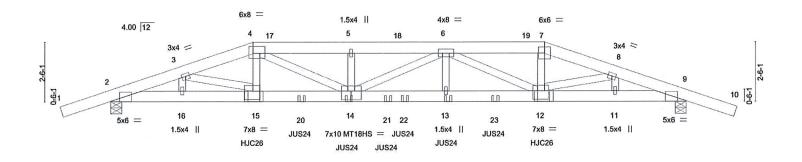


🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and furus systems, see ANSIITH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job			Truss		Truss Type		Qty	Ply	Yavapai County 2 Bedroom		To an extension the second
							120				R64674239
105781			A5		GIRDER		1	2			
								_	Job Reference (optional)		
Ballard	d Truss LL	C, S	nowflake,	AZ - 85937,			8	.430 s Nov	30 2020 MiTek Industries, Inc	Tue Dec 8 08:3	5:41 2020 Page 1
						ID:U?N	WOCY_P	_W3D7ww2	Z7I1e8yB4r?-nS2hlLyPE8zTAF	oXwYifErKkaHzk	Tt2xV0tOz3yB4X0
1	-2-0-0	1	3-0-0	6-0-0	10-1-15	14-2-1	1	18-4-0	21-4-0	24-4-0	26-4-0
,	2-0-0		3-0-0	3-0-0	4-1-15	4-0-3		4-1-15	3-0-0	3-0-0	2-0-0

Scale = 1:46.6



	3-0-0 6-0-0 3-0-0 3-0-0		0-1-15 4-1-15	14-2-1 4-0-3	18-4-0 4-1-15	21-4-0 3-0-0	24-4-0 3-0-0	
Plate Offsets (X,Y) [2	0-4-6,Edge], [4:0-6-0,0-3	3-8], [9:0-4-6,Ed	ge], [12:0-4-0,0-	-4-4], [14:0-5-0,0-4-8], [1	5:0-3-8,0-4-4]			
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/I	2-0-0 1.15 1.15 NO PI2014	CSI. TC 0.3 BC 0.6 WB 0.7 Matrix-SH	65 Vert(CT) 76 Horz(CT)	in (loc) I/defl -0.36 13-14 >791 -0.48 13-14 >597 0.10 9 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 262 lb	GRIP 185/144 185/144 FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

2x6 SPF 2100F 1.8E **BOT CHORD** 

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS.

(size) 2=0-5-8, 9=0-5-8 Max Horz 2=51(LC 46)

Max Uplift 2=-653(LC 6), 9=-652(LC 7) Max Grav 2=3967(LC 17), 9=3961(LC 18)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 2-3=-8923/1210, 3-4=-10219/1447, 4-5=-12975/1838, 5-6=-12974/1838, 6-7=-9871/1410, 7-8=-10171/1437, 8-9=-8907/1212

**BOT CHORD** 2-16=-1105/8248, 15-16=-1105/8248, 14-15=-1328/9805, 13-14=-1759/13012,

12-13=-1759/13012, 11-12=-1063/8231, 9-11=-1063/8231

3-16=-495/136, 3-15=-227/1612, 4-15=-109/1169, 4-14=-516/3530, 5-14=-506/145,

6-13=-115/1067, 6-12=-3525/522, 7-12=-324/2612, 8-12=-218/1583, 8-11=-471/129

### NOTES-

**WEBS** 

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate orio DOL=1.33
- 4) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 9) All plates are MT20 plates unless otherwise indicated.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=653, 9=652.

### Continued on page 2

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIITH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Structural wood sheathing directly applied or 5-0-6 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



MiTek USA, Inc. venue, Suite 270 Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom
		***			R64674239
105781	A5	GIRDER	1	2	
					Job Reference (optional)
Ballard Truss LLC. Sr	owflake, AZ - 85937,		8	.430 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:41 2020 Page 2

ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-nS2hlLyPE8zTAFoXwYifErKkaHzkTt2xV0tOz3yB4X0

### NOTES-

- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

  14) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 12-3-4 oc max. starting at 6-0-6 from the left end to 18-3-10 to connect
- truss(es) to front face of bottom chord.

  15) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 16-3-4 to connect truss(es) to front face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)

Vert: 1-4=-100, 4-7=-100, 7-10=-100, 2-9=-20

Concentrated Loads (lb)

Vert: 15=-945(F) 14=-407(F) 13=-407(F) 12=-945(F) 20=-407(F) 21=-407(F) 22=-407(F) 23=-407(F)

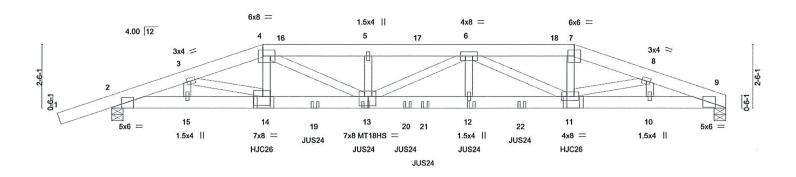
REVIEWED FOR DESIGN CRITERIA ONLY

MiTek



Job	Truss		Truss Type	Qt	y Ply	Yavapai County	y 2 Bedroom	***************************************
								R64674240
105781	A5A		GIRDER	1				
						Job Reference (	optional)	
Ballard Truss LLC,	Snowflake, AZ -	85937,			8.430 s N	ov 30 2020 MiTek I	Industries, Inc. Tue Dec	8 08:35:43 2020 Page 1
				ID:U?NWOcY_	P_W3D7wwZ7	11e8yB4r?-krASA0	_gmlDAPYyv1zk7KGP5	L5gbxnEEzKMV1xyB4X_
-2-0-0	3-0-0	6-0-0	10-1-15	14-2-1	1	18-4-0	21-4-0	24-4-0
2-0-0	3-0-0	3-0-0	4-1-15	4-0-3		4-1-15	3-0-0	3-0-0

Scale = 1:43.7



-		0-0	10-1-15	14-2-1		18-4-0		21-4-0	24-4-0
Plate Offsets (X,Y) [2		-	4-1-15 3-12,0-4-8], [14:0-3-8,0-4-	4-0-3 4]		4-1-15		3-0-0	3-0-0
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/	2-0-0 1.15 1.15 NO TPI2014	CSI. TC 0.31 BC 0.62 WB 0.72 Matrix-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.35 12-13 -0.46 12-13 0.09 9	l/defl >813 >624 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 255 lb	GRIP 185/144 185/144 FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

**BOT CHORD** 2x6 SPF 2100F 1.8E

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS.

(size) 9=0-5-8, 2=0-5-8

Max Horz 2=66(LC 6) Max Uplift 9=-607(LC 7), 2=-683(LC 6)

Max Grav 9=3450(LC 18), 2=3867(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-8669/1287, 3-4=-9918/1539, 4-5=-12504/1990, 5-6=-12503/1990, 6-7=-9136/1652,

7-8=-9416/1687, 8-9=-8441/1494

BOT CHORD 2-15=-1192/8012, 14-15=-1192/8012, 13-14=-1431/9518, 12-13=-1992/12343,

11-12=-1992/12343, 10-11=-1365/7823, 9-10=-1365/7823

**WEBS** 3-15=-479/141, 3-14=-245/1558, 4-14=-108/1171, 4-13=-589/3325, 5-13=-508/145,

6-13=-48/311, 6-12=-148/994, 6-11=-3600/521, 7-11=-389/2386, 8-11=-358/1394,

8-10=-383/112

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x6 2 rows staggered at 0-7-0 oc. Bottom chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

  3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 4) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Cl=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 9) All plates are MT20 plates unless otherwise indicated.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss was and bracing of truss systems, see ANSIIPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Structural wood sheathing directly applied or 5-1-14 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom R64674240
105781	A5A	GIRDER	1	2	Job Reference (optional)

Ballard Truss LLC,

Snowflake, AZ - 85937,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:43 2020 Page 2 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-krASA0\_gmlDAPYyv1zk7KGP5L5gbxnEEzKMV1xyB4X\_

### NOTES-

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 14) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 12-3-4 oc max. starting at 6-0-6 from the left end to 18-3-10 to connect truss(es) to back face of bottom chord.
- 15) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 16-3-4 to connect truss(es) to back face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-100, 4-7=-100, 7-9=-100, 2-9=-20

Concentrated Loads (lb)

Vert: 14=-945(B) 13=-407(B) 12=-360(B) 11=-665(B) 19=-407(B) 20=-407(B) 21=-407(B) 22=-360(B)

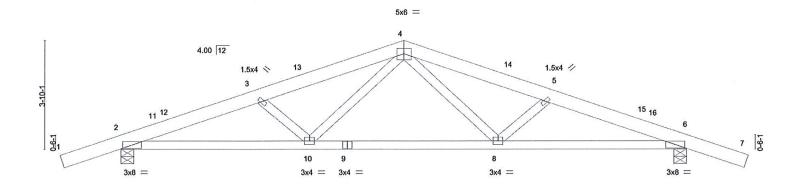
**REVIEWED FOR DESIGN CRITERIA** ONLY

MiTek



Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom	
						R64674241
105781	B1	Common	5	1		
	1902				Job Reference (optional)	
Ballard Truss LLC,	Snowflake, AZ - 85937,	-	8	.430 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8	08:35:44 2020 Page 1
			ID:U?NWOcY_P_W3D7	wwZ7l1e8y	yB4r?-C1kqNM?IX3L11iX5bgFMsUyGYV2H	gKWOB_52YNyB4Wz
-2-0-0	5-0-0	10-0-0	15	5-0-0	20-0-0	22-0-0
2-0-0	5-0-0	5-0-0	5	-0-0	5-0-0	2-0-0

Scale = 1:38.9



	6-8-0 6-8-0				13-4-0 6-8-0					20-0-0 6-8-0	<del></del> I
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES I2014	CSI. TC BC WB Matri	0.28 0.47 0.33 x-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.19 0.06	(loc) 8-10 8-10 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 87 lb	GRIP 185/144 FT = 10%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E **BOT CHORD** 2x4 SPF 1650F 1.5E

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS. (size) 2=0-5-8, 6=0-5-8 Max Horz 2=75(LC 18)

Max Uplift 2=-260(LC 10), 6=-260(LC 11)

Max Grav 2=1521(LC 21), 6=1521(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2795/439, 3-4=-2294/377, 4-5=-2294/376, 5-6=-2795/438

**BOT CHORD** 2-10=-324/2525, 8-10=-181/1613, 6-8=-344/2525

**WEBS** 4-8=-52/766, 5-8=-626/176, 4-10=-51/766, 3-10=-626/175

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 10-0-0, Exterior(2R) 10-0-0 to 13-6-0, Interior(1) 13-6-0 to 22-0-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=260, 6=260.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 5-4-1 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss was and bracing of truss systems, see ANSIITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom	
						R64674242
105781	B2	Hip	1	1		
					Job Reference (optional)	
Ballard Truss LLC,	Snowflake, AZ - 85937,		8	.430 s Nov	30 2020 MiTek Industries, Inc. Tue De	c 8 08:35:45 2020 Page 1
			ID:U?NWOcY_P_W3	3D7wwZ7I1	le8yB4r?-gDICbi?wINTufs6l9OmbPhUN	MzuMePqhXQerc5qyB4Wy
-2-0-0	8-0-0		12-0-0		20-0-0	22-0-0
2-0-0	8-0-0		4-0-0		8-0-0	2-0-0

Scale = 1:39.6

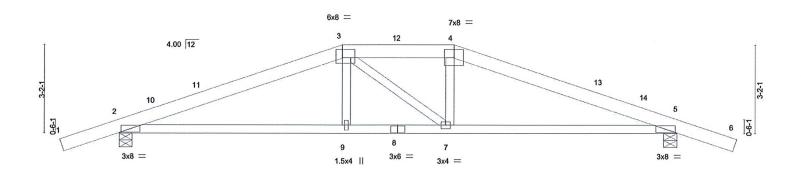


Plate Offsets (X,Y) [3:	8-0-0 8-0-0 0-5-4,0-3-8]		12-0-0 4-0-0	1	20-0-0 8-0-0		
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.62 BC 0.59 WB 0.14 Matrix-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.14 2-9 -0.26 2-9 0.07 5		PLATES MT20 Weight: 81 lb	GRIP 185/144 FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E BOT CHORD 2x4 SPF 1650F 1.5E

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud WEBS

REACTIONS. (size) 2=0-5-8, 5=0-5-8

Max Horz 2=-63(LC 15) Max Uplift 2=-274(LC 10), 5=-274(LC 11) Max Grav 2=1793(LC 35), 5=1793(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-2524/476, 3-4=-2194/522, 4-5=-2527/499 2-9=-334/2184, 7-9=-331/2191, 5-7=-367/2187 TOP CHORD

**BOT CHORD** 

3-7=-314/321, 4-7=-47/293 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 8-0-0, Exterior(2E) 8-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 16-11-6, Interior(1) 16-11-6 to 22-0-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=274, 5=274.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-3-8 oc purlins.

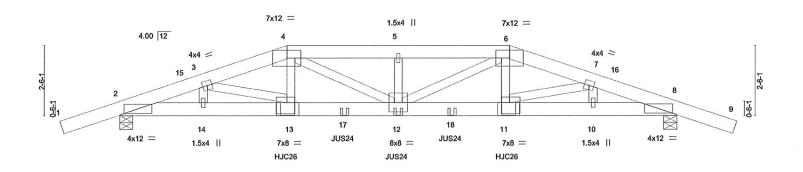
Rigid ceiling directly applied or 10-0-0 oc bracing.

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type		Qty	Ply	Yavapai County 2 Bedi	room	ALLOW MANAGES AND ADDRESS OF THE PARTY AND ADD
					1			R64674243
105781	B3	GIRDER		1	1			
						Job Reference (optiona	1)	
Ballard Truss LLC,	Snowflake, AZ - 8593	7,		8	.430 s Nov	30 2020 MiTek Industrie	es, Inc. Tue Dec 8 0	8:35:47 2020 Page 1
				ID:U?NWOcY_P_	W3D7wwZ	7I1e8yB4r?-ccQy?O1Aq	_jcuAGgGpp3U6ajGi	?EtdequyKj9iyB4Ww
-2-0-0	3-0-0	6-0-0	10-0-0	14-0-0	**********	17-0-0	20-0-0	22-0-0
2-0-0	3-0-0	3-0-0	4-0-0	4-0-0		3-0-0	3-0-0	2-0-0

Scale = 1:39.6



	3-0-0 3-0-0	6-0-0 3-0-0	10-0-0 4-0-0	14-0-0 4-0-0	17-0-0 3-0-0	20-0-0 3-0-0
Plate Offsets (X,Y)	[11:0-3-8,0-4-12], [13:	0-3-8,0-4-12]				
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip D Lumber DOI Rep Stress I Code IRC20	1.15	CSI. TC 0.51 BC 0.71 WB 0.62 Matrix-SH		c) I/defl L/d 2 >718 240 2 >536 180 8 n/a n/a	PLATES GRIP MT20 185/144 Weight: 108 lb FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

**BOT CHORD** 2x6 SPF 2100F 1.8E

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud **WEBS** 

REACTIONS. (size) 2=0-5-8, 8=0-5-8

Max Horz 2=-51(LC 47) Max Uplift 2=-511(LC 6), 8=-511(LC 7)

Max Grav 2=3137(LC 31), 8=3137(LC 31)

FORCES. (ib) - Max. Comp./Max. Ten. - All forces 250 (ib) or less except when shown. TOP CHORD 2-3=-6768/848, 3-4=-7487/1020, 4-5=-8237/1156, 5-6=-8237/1156, 6-7=-7487/1020,

7-8=-6768/852

**BOT CHORD** 2-14=-769/6243, 13-14=-769/6243, 12-13=-921/7179, 11-12=-887/7179, 10-11=-736/6243,

8-10=-736/6243 WEBS 3-14=-384/117, 3-13=-179/1090, 4-13=-119/1226, 4-12=-221/1451, 5-12=-502/157,

6-12=-221/1451, 6-11=-120/1226, 7-11=-181/1090, 7-10=-384/116

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=511, 8=511,
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 7-11-4 oc max. starting at 6-0-6 from the left end to 13-11-10 to connect truss(es) to front face of bottom chord.
- 12) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 1-11-4 oc max. starting at 8-0-12 from the left end to 11-11-4 to connect truss(es) to front face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.
- Odition the hoping ASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Structural wood sheathing directly applied or 2-9-2 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom
		OLD TO			R64674243
105781	B3	GIRDER	1	1 2	Job Reference (optional)
Ballard Truss LLC, S	nowflake, AZ - 85937,	1	8		30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:47 2020 Page 2

Snowflake, AZ - 85937,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:47 2020 Page 2 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-ccQy?O1Aq\_jcuAGgGpp3U6ajGi?EtdequyKj9iyB4Ww

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-100, 4-6=-100, 6-9=-100, 2-8=-20
Concentrated Loads (lb)
Vert: 13=-945(F) 12=-407(F) 11=-945(F) 17=-407(F) 18=-407(F)

REVIEWED FOR DESIGN CRITERIA ONLY





MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661

Yavapai County 2 Bedroom Job Truss Truss Type Qty Ply R64674244 12 105781 J2 Jack-Open Job Reference (optional) Ballard Truss LLC, 8,430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:48 2020 Page 1 Snowflake, AZ - 85937, ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-4o\_KDk2oblrTWKrtqWKI1K6yE6W8cDez6c3Gh9yB4Wv 2-0-0 2-0-0 1-10-15 Scale = 1:9.3 3 5 4.00 12 2 1-1-11 9-1-0 0-6-1 5x6 =LOADING (psf) SPACING-PLATES GRIP 2-0-0 CSI. DEFL. L/d I/defl (loc) 40.0 TC Vert(LL) -0.00 >999 240 197/144 Plate Grip DOL 1.15 0.24 MT20 (Roof Snow=40.0) 0.02 -0.00 >999 180 BC Vert(CT) Lumber DOL 1.15 TCDL 10.0 WB 0.00 Horz(CT) -0.00 3 Rep Stress Incr YES n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 10 lb FT = 10%BCDL 10.0 BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

TOP CHORD 2x6 SPF 1650F 1.5E

2x4 SPF 1650F 1.5E **BOT CHORD** 

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical

Max Horz 2=66(LC 10)

Max Uplift 3=-199(LC 20), 2=-168(LC 10)

Max Grav 3=25(LC 10), 2=636(LC 20), 4=37(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 1-10-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 3=199, 2=168,
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 1-10-15 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Yayapai County 2 Bedroom R64674245 105781 10 Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MTek Industries, Inc. Tue Dec 8 08:35:48 2020 Page 1 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-4o\_KDk2oblrTWKrtqWKI1K6xd6VvcDez6c3Gh9yB4Wv Ballard Truss LLC, Snowflake, AZ - 85937, 3-10-15 2-0-0 3-10-15 Scale = 1:12.6 3 4.00 12 -9-11 1-3-6 0-6-1 4x4 = 3-10-15 Plate Offsets (X,Y)-- [2:0-3-6,Edge] LOADING (psf) SPACING-DEFL. PLATES GRIP 2-0-0 CSI. in I/defl L/d (loc) TCLL 40.0 Plate Grip DOL TC Vert(LL) -0.01 197/144 1.15 0.28 2-4 >999 240 **MT20** (Roof Snow=40.0) Lumber DOL BC -0.02 180 1.15 0.10 Vert(CT) 2-4 >999 TCDL 10.0 Rep Stress Incr WB YES 0.00 Horz(CT) -0.00 3 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 16 lb FT = 10% BCDL 10.0 LUMBER-BRACING-TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.

**BOT CHORD** 

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

TOP CHORD 2x6 SPF 1650F 1.5E **BOT CHORD** 

2x4 SPF 1650F 1.5E

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical Max Horz 2=94(LC 10)

Max Uplift 3=-96(LC 20), 2=-164(LC 10)

Max Grav 3=154(LC 21), 2=726(LC 21), 4=72(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 3-10-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=164.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



🔼 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



MiTek USA, Inc. 400 Sunrise Avenue, Roseville, CA 95661 nue, Suite 270 Job Truss Truss Type Qty Ply Yavapai County 2 Bedroom R64674246 105781 J4A Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:49 2020 Page 1 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-Y?XjQ42QMbzK7TP3OErXZXf6NWs\_Lgu7LGppEbyB4Wu Ballard Truss LLC. Snowflake, AZ - 85937, 3-10-15 2-0-0 3-10-15 Scale = 1:12.6 3 4.00 12 -9-11 0-6-1 4x4 = Plate Offsets (X,Y)-- [2:0-3-6,Edge] LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI. I/defl L/d in (loc) TCLL 40.0 Plate Grip DOL TC 0.28 Vert(LL) 197/144 1.15 -0.00 2-5 >999 240 **MT20** (Roof Snow=40.0) Lumber DOL BC -0.00 180 1.15 0.05 Vert(CT) 2-5 >999 TCDL 10.0 Rep Stress Incr WB 0.00 Horz(CT) YES -0.00 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 16 lb FT = 10% BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x6 SPF 1650F 1.5E Structural wood sheathing directly applied or 3-10-15 oc purlins. TOP CHORD

**BOT CHORD** 

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

**BOT CHORD** 2x4 SPF 1650F 1.5E

> (size) 3=Mechanical, 2=0-5-8, 4=Mechanical, 5=0-5-8 Max Horz 2=94(LC 10)

Max Uplift 3=-96(LC 20), 2=-172(LC 10), 4=-48(LC 5)

Max Grav 3=154(LC 21), 2=714(LC 21), 5=146(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 3-10-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb)
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

CECIL DYFR ARIZONA U.S.P REVIEWED TO BINDON DESIGNACER DEF 9,2020

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MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661

Job Yavapai County 2 Bedroom Truss Truss Type Qty R64674247 105781 J4B Jack-Open Job Reference (optional) Snowflake, AZ - 85937, Ballard Truss LLC 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:50 2020 Page 1 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-0B55eQ337v5Bld\_FxxMm6lCJHvBN478GavYNm1yB4Wt 3-10-15 Scale = 1:11.8 2 4.00 12 1-9-11 0-6-1 3x4 = 3-10-15 3-10-15 LOADING (psf) SPACING-2-0-0 CSI. DEFL. PLATES GRIP I/defl L/d in (loc) 40.0 TCLL Plate Grip DOL 1.15 TC Vert(LL) -0.01 >999 240 197/144 0.14 1-3 MT20 (Roof Snow= 40.0) BC Lumber DOL 1.15 0.10 Vert(CT) -0.02 >999 180 1-3 TCDL 10.0 Rep Stress Incr WB 0.00 Horz(CT) -0.00 2 YES n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 12 lb FT = 10% BCDL 10.0 LUMBER-**BRACING-**TOP CHORD 2x6 SPF 1650F 1.5E TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

**BOT CHORD** 

2x4 SPF 1650F 1.5E

(size) 1=0-5-8, 2=Mechanical, 3=Mechanical

Max Horz 1=61(LC 10)

Max Uplift 1=-23(LC 10), 2=-68(LC 10)

Max Grav 1=282(LC 20), 2=246(LC 20), 3=72(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

REACTIONS.

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
  4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors. 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections. 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



A WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Yavapai County 2 Bedroom Truss Truss Type Qty Ply R64674248 105781 **J**6 Jack-Closed 18 | Job Reference (optional)

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:50 2020 Page 1
|D:U?NWOcY\_P\_W3D7wwZ711e8yB4r?-0B55eQ337v5Bld\_FxxMm6lCH1v95478GavYNm1yB4Wt Snowflake, AZ - 85937, Ballard Truss LLC 2-0-0 Scale = 1:17.0 3x4 || 4.00 12 0-6-1 6 3x4 || 5 6-0-0 Plate Offsets (X,Y)-- [2:0-3-10,Edge] LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES** GRIP 2-0-0 in (loc) I/defl 40.0 TCLL Plate Grip DOL 185/144 1.15 TC 0.28 Vert(LL) -0.05 2-6 >999 240 MT20 (Roof Snow=40.0) Lumber DOL 1.15 BC 0.25 Vert(CT) -0.10 2-6 >664 180 TCDL 10.0 WB Rep Stress Incr YES 0.00 Horz(CT) 0.00 6 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Weight: 24 lb FT = 10% Matrix-P BCDL 10.0 BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

**BOT CHORD** 2x4 SPF 1650F 1.5E

**WEBS** 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

REACTIONS. (size) 6=Mechanical, 2=0-5-8

Max Horz 2=113(LC 11)

Max Uplift 6=-53(LC 14), 2=-172(LC 10) Max Grav 6=427(LC 21), 2=839(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 3-6=-366/245

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 6-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
  2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb)
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Yavapai County 2 Bedroom Truss Truss Type Qty Ply R64674249 105781 J6A Jack-Closed Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:51 2020 Page 1
ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-VNfTrl4huDD2NnZSVft?eykSnJYTpaDQoZlwlTyB4Ws Ballard Truss LLC, Snowflake, AZ - 85937, 2-0-0 Scale = 1:16.8 4x4 = 3 4.00 12 0-6-1 3x4 || 5 1.5x4 Plate Offsets (X,Y)-- [2:0-3-10,Edge] LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI. I/defl L/d in (loc) TCLL 40.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.00 >999 240 185/144 2-7 MT20 (Roof Snow=40.0) Lumber DOL BC 0.05 Vert(CT) -0.00 >999 180 1.15 2-7 TCDL 10.0 WB Rep Stress Incr YES 0.01 Horz(CT) -0.00 6 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 29 lb FT = 10%BCDL 10.0 **BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E

**BOT CHORD** 2x4 SPF 1650F 1.5E

**WEBS** 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

REACTIONS. (size) 6=Mechanical, 2=0-5-8, 7=0-5-8

Max Horz 2=113(LC 11)

Max Uplift 6=-76(LC 14), 2=-194(LC 10)

Max Grav 6=380(LC 21), 2=794(LC 21), 7=139(LC 5)

FORCES. (lib) - Max. Comp./Max. Ten. - All forces 250 (lib) or less except when shown. TOP CHORD 3-6=-353/250

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-14 to 1-5-2, Interior(1) 1-5-2 to 6-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
  4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=194.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

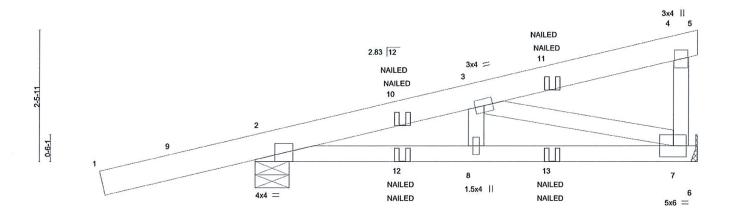
Rigid ceiling directly applied or 6-0-0 oc bracing.

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Yavapai County 2 Bedroom R64674250 105781 JC1 MONO GIRDER Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:52 2020 Page 1 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-zZDr355JfWLv\_x8e3MOEBAHYFjrOYzJZ1D1UqwyB4Wr Ballard Truss LLC. Snowflake, AZ - 85937, 4-2-3 4-2-3 2-9-15 4-2-2

Scale = 1:20.8



		1		4-2-3 4-2-3			1			4-5 2-2	
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TI	2-0-0 1.15 1.15 NO Pl2014	CSI. TC BC WB Matri	0.62 0.20 0.28 x-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.02 -0.03 0.01	(loc) 8 7-8 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 39 lb	GRIP 185/144 FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

TOP CHORD 2x6 SPF 1650F 1.5E

BOT CHORD 2x4 SPF 1650F 1.5E

WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

(size) 7=Mechanical, 2=0-7-12 Max Horz 2=106(LC 7)

Max Uplift 7=-47(LC 10), 2=-202(LC 6)

Max Grav 7=567(LC 17), 2=1014(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD

2-3=-862/253, 4-7=-331/73 2-8=-320/725, 7-8=-320/725

BOT CHORD 2-8=-320/725 WEBS 3-7=-754/333

### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=202.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

 Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-4=-100, 4-5=-100, 2-6=-20

### Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIITPII Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom
105781	JC1	MONO GIRDER	5	1	R64674250
		20 H 42 T 10 WASSING V			Job Reference (optional)

Ballard Truss LLC,

Snowflake, AZ - 85937,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:52 2020 Page 2 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-zZDr355JfWLv\_x8e3MOEBAHYFjrOYzJZ1D1UqwyB4Wr

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 10=68(F=34, B=34) 11=-38(F=-19, B=-19) 13=-16(F=-8, B=-8)

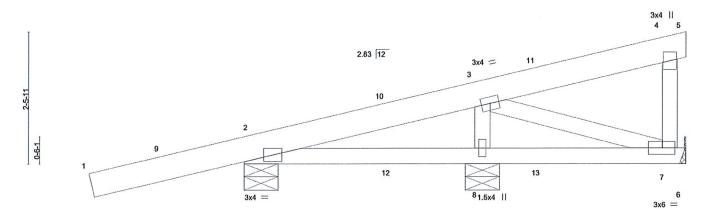
REVIEWED FOR DESIGN CRITERIA ONLY



MITEK
MITEK USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	P	ly	Yavapai County 2 Bedroom	
						R6467425	51
105781	JC2	MONO GIRDER	1		1		
-		and the state of t				Job Reference (optional)	
Ballard Truss LLC,	Snowflake, AZ - 85937,			8.43	30 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:53 2020 Page 1	
			ID:U?NWOcY_P_W	3D7w	wZ7I1e8	yB4r?-RmnDGR6xQqUmc5jqd3wTkNqjE7C5HTyjGtn1NMyB4Wq	
1	-2-9-15		4-6-1	2 67 1100	1	8-4-5	
	2-9-15		4-6-1			3-10-4	

Scale = 1:20.8



	4-6						-	8-4-5 3-10-4				
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 NO	CSI. TC BC WB Matri	0.60 0.10 0.12	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.02 -0.00	(loc) 2-8 2-8 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 38 lb	GRIP 185/144 FT = 10%	

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

TOP CHORD 2x6 SPF 1650F 1.5E

BOT CHORD 2x4 SPF 1650F 1.5E

WEBS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

(size) 7=Mechanical, 2=0-7-12, 8=0-7-12 Max Horz 2=106(LC 7)

Max Uplift 7=-73(LC 6), 2=-220(LC 6), 8=-228(LC 16)

Max Grav 7=334(LC 31), 2=896(LC 16), 8=478(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 4-7=-314/78 WEBS 3-8=-419/287

### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 40.0 psf on overhangs non-concurrent with other live loads.
- 5) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=220, 8=228.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 82 lb down and 231 lb up at 2-9-8, 82 lb down and 231 lb up at 2-9-8, and 184 lb down and 81 lb up at 5-7-7, and 98 lb down and 52 lb up at 5-7-7 on top chord, and 2 lb down at 2-9-8, 2 lb down at 2-9-8, and 19 lb down at 5-7-7, and 52 lb up at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

### Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and percyt damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSIITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom
105781	JC2	MONO GIRDER	1	1	R64674251
	2. 22.2	age of a community of	-		Job Reference (optional)

Ballard Truss LLC,

Snowflake, AZ - 85937,

8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:53 2020 Page 2 ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-RmnDGR6xQqUmc5jqd3wTkNqjE7C5HTyjGtn1NMyB4Wq

LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 1-4=-100, 4-5=-100, 2-6=-20

Concentrated Loads (lb)

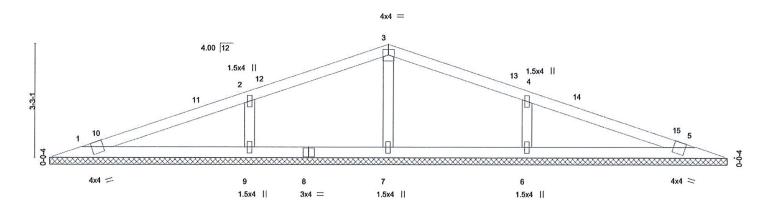
Vert: 10=68(F=34, B=34) 11=-124(F=-19, B=-105) 13=45(F=52, B=-8)

REVIEWED FOR DESIGN CRITERIA ONLY



MiTek MiTek USA, Inc. 400 Sunrise Avenue, Suite 270 Roseville, CA 95661 Job Truss Truss Type Qty Ply Yavapai County 2 Bedroom R64674252 105781 V1 DROP GABLE Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:54 2020 Page 1 Ballard Truss LLC, Snowflake, AZ - 85937, ID:U?NWOcY\_P\_W3D7wwZ7I1e8yB4r?-vyLcTn6ZA8cdEFI0AnRiGbMxYXWR0vYsVXWavoyB4Wp 19-6-4

Scale: 3/8"=1"



ı			19-6-4						
Plate Offsets (X,Y) [4:	0-0-0,0-0-0]								
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.44 BC 0.22 WB 0.17 Matrix-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 5	I/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 51 lb	GRIP 185/144 FT = 10%

19-6-4

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E

2x4 SPF 1650F 1.5E **BOT CHORD** 

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud **OTHERS** 

BRACING-

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

ONS. All bearings 19-6-4.
(lb) - Max Horz 1=55(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-134(LC 14), 6=-134(LC 15)

All reactions 250 lb or less at joint(s) except 1=292(LC 20), 5=292(LC 21), 7=353(LC 1), 9=879(LC 20), Max Grav

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

3-7=-307/69, 2-9=-730/197, 4-6=-730/197 **WEBS** 

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 4-5-5, Interior(1) 4-5-5 to 9-9-2, Exterior(2R) 9-9-2 to 13-3-2, Interior(1) 13-3-2 to 18-6-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=134, 6=134,
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom	
		¥20	200	100	R646	674253
105781	V2	DROP GABLE	1	1		
					Job Reference (optional)	
Ballard Truss LLC,	Snowflake, AZ - 85937,		3	.430 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:55 2020 Pag	e 1
			ID:U?NWOcY_P_W	3D7wwZ7I	1e8yB4r?-N8v_h77BxRkTrOtDkUyxpov8swuzINO?jBG8RFyB4V	No
1		7-9-2	Extension and a contract section		15-6-4	
		7-9-2			7-9-2	

Scale = 1:25.3

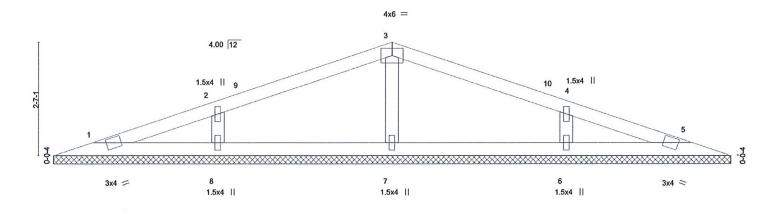


Plate Offsets (X,Y)	4:0.0.0.0.01				15-6-4						
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0	#:0-0-0,0-0-0]  SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.28 0.08 0.13	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 5	I/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 185/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/T	PI2014	Matri	x-SH						Weight: 39 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E

**BOT CHORD** 2x4 SPF 1650F 1.5E

2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

BRACING-TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-6-4.

(lb) - Max Horz 1=-43(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=-104(LC 14), 6=-104(LC 15)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=435(LC 1), 8=668(LC 20), 6=668(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS

3-7=-355/117, 2-8=-582/198, 4-6=-583/198

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 4-5-5, Interior(1) 4-5-5 to 7-9-2, Exterior(2R) 7-9-2 to 11-3-2, Interior(1) 11-3-2 to 14-6-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
  2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (it=lb) 8=104, 6=104.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

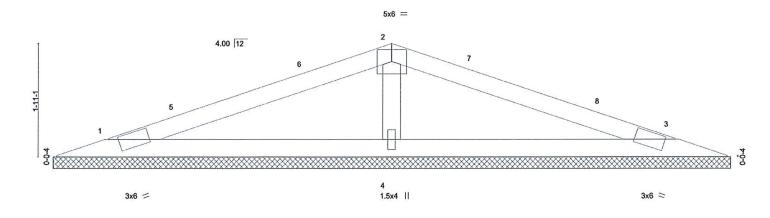


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Job	Truss	Truss Type	Qty	Ply	Yavapai County 2 Bedroom
				1	R64674254
105781	V3	DROP GABLE	1	1	
					Job Reference (optional)
Ballard Truss LLC,	Snowflake, AZ - 85937,		8	.430 s Nov	30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:55 2020 Page 1
			ID:U?NWOcY_P_W	3D7wwZ7I	1e8yB4r?-N8v_h77BxRkTrOtDkUyxpov57wq5lNk?jBG8RFyB4Wo
1	5-9-				11-6-4
	5-9-:				5-9-2

Scale = 1:18.8



			11-6-4						
LOADING (psf) TCLL 40.0 (Roof Snow=40.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.45 BC 0.32 WB 0.11 Matrix-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 26 lb	GRIP 185/144 FT = 10%

11-6-4

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-TOP CHORD

REACTIONS.

2x4 SPF 1650F 1.5E

**BOT CHORD** 2x4 SPF 1650F 1.5E

OTHERS 2x4 DF Stud or 2x4 HF Stud or 2x4 SPF Stud

(size) 1=11-6-4, 3=11-6-4, 4=11-6-4

Max Horz 1=30(LC 14)

Max Uplift 1=-45(LC 10), 3=-48(LC 15), 4=-59(LC 10)

Max Grav 1=351(LC 20), 3=351(LC 21), 4=661(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**WEBS** 2-4=-468/252

### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 4-5-5, Interior(1) 4-5-5 to 5-9-2, Exterior(2R) 5-9-2 to 9-3-2, Interior(1) 9-3-2 to 10-6-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33

  2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

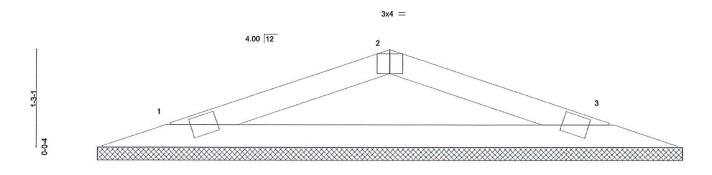
🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and furus systems, see ANSIIP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty Ply Yavapai County 2 Bedroom
		1.0000000000000000000000000000000000000	R64674255
105781	V4	DROP GABLE	1   1
			Job Reference (optional)
Ballard Truss LLC,	Snowflake, AZ - 85937,		8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Dec 8 08:35:56 2020 Page 1
			ID:U?NWOcY_P_W3D7wwZ7I1e8yB4r?-rLSMuT8pilsKTYSPICTAL0SKfKB0Urd9yr?hzhyB4Wn
L		3-9-2	7-6-4
		3-9-2	3-9-2

Scale = 1:14.2

400



3x4 =

3x4 =

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

L				7-6-4						1
7-6-4										
Plate Offsets (X,Y) [2:0	)-2-0,Edge]									
OADING (psf)  CLL 40.0  Roof Snow=40.0)  CDL 10.0  BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	TC BC	0.21 0.28 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	I/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 15 lb	GRIP 197/144 FT = 10%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF 1650F 1.5E BOT CHORD 2x4 SPF 1650F 1.5E

(size) 1=7-6-4, 3=7-6-4

Max Horz 1=18(LC 18) Max Uplift 1=-44(LC 10), 3=-44(LC 11) Max Grav 1=366(LC 20), 3=366(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-476/356, 2-3=-476/361

BOT CHORD 1-3=-296/417

### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=40.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) As requested, plates have not been designed to provide for placement tolerances or rough handling and erection conditions. It is the responsibility of the fabricator to increase plate sizes to account for these factors.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



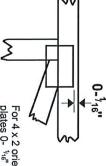
## Symbols

# PLATE LOCATION AND ORIENTATION



Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss Center plate on joint unless x, y offsets are indicated

and fully embed teeth.



edge of truss. plates 0- 1/16" from outside For 4 x 2 orientation, locate

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This symbol indicates the

required direction of slots in

connector plates

\*Plate location details available in MiTek 20/20 software or upon request.

## PLATE SIZE

width measured perpendicular to slots. Second dimension is the length parallel to slots. The first dimension is the plate

# LATERAL BRACING LOCATION



if indicated. Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing

### BEARING



Min size shown is for crushing only number where bearings occur. reaction section indicates joint Indicates location where bearings (supports) occur. Icons vary but

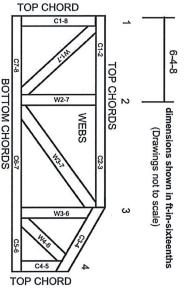
### ANSI/TPI1: Industry Standards:

National Design Specification for Metal Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-89: Building Component Safety Information, Guide to Good Practice for Handling,

Connected Wood Trusses. Installing & Bracing of Metal Plate

# **Numbering System**



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

# PRODUCT CODE APPROVALS

ICC-ES Reports:

ER-3907, ESR-2362, ESR-1397, ESR-3282 ESR-1311, ESR-1352, ESR1988

truss unless otherwise shown. Trusses are designed for wind loads in the plane of the

section 6.3 These truss designs rely on lumber values Lumber design values are in accordance with ANSI/TPI 1 established by others

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# General Safety Notes

## Failure to Follow Could Cause Proper Damage or Personal Injury

- 1. Additional stability bracing for truss system, e.g. CRI diagonal or X-bracing, is always required. See BCSI.

  2. Truss bracing must be designed by an engineer. When the process them wide truss spacing, individual lateral braces them will bracing should be considered.

  3. Never exceed the design loading shown and never the process them will be considered.
- stack materials on inadequately braced trusses
- Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and

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- Cut members to bear tightly against each other.
- Place plates on each face of truss at each locations are regulated by ANSI/TPI 1. joint and embed fully. Knots and wane at joint
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- . Camber is a non-structural consideration and is the camber for dead load deflection. responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.

